

AMENDMENTS TO THE CLAIMS:

Please cancel without prejudice claims 1-22 (amended sheets of claims attached to the IPER) and add newly written claims 23-40 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-22. (*Cancelled*)

23. (*New*) An antenna system, comprising a beam-forming network linked to a plurality of antenna elements organised, in operation, into a plurality of first-order groups of antenna elements, the beam-forming network comprising:

a plurality of local networks each operable to manipulate signals received by or to be transmitted by antenna elements of one or more of said plurality of first-order groups of antenna elements;

a remote network for manipulating signals received from or to be transmitted to said plurality of local networks; and

a controller operable to reconfigure dynamically the organisation of groups from said plurality of first-order groups of antenna elements into one or more second-order groups of antenna elements.

24. (*New*) An antenna system according to Claim 23, wherein the organisation of antenna elements into said plurality of first-order groups is fixed.

25. (*New*) An antenna system according to Claim 23, wherein said controller is operable further to select a frequency band for receiving signals from or transmitting signals to said one or more second-order groups of antenna elements.

26. (*New*) An antenna system according to Claim 23, wherein each of said plurality of local networks is operable to combine signals received from the antenna elements of a respective first-order group before transmission to the remote network and to separate a signal received from the remote network into signals for transmission to the antenna elements of a respective first-order group.

27. (*New*) An antenna system according to Claim 23, wherein the local network is operable with RF signals.

28. (*New*) An antenna system according to Claim 27, wherein the remote network is operable with optical frequency signals.

29. (*New*) An antenna system according to Claim 28, wherein the local network is operable to upconvert an RF signal to an optical frequency signal prior to transmission to the remote network.

30. (*New*) An antenna system according to Claim 23, wherein the remote network is operable to digitise a signal received from the local network.

31. *(New)* An antenna system according to Claim 23, wherein the remote network is operable to provide true time delay to signals received from or for transmission to said plurality of local networks.

32. *(New)* An antenna system according to Claim 23, wherein said antenna elements are operable with one of two polarisations.

33. *(New)* An antenna system according to Claim 32, wherein the polarisations are mutually orthogonal.

34. *(New)* An antenna system according to Claim 23, wherein each of said one or more second order groups are provided with their own receiver.

35. *(New)* An antenna system according to Claim 23, further comprising at least one group of antenna elements for use in an ESM analysis mode.

36. *(New)* An antenna system according to Claim 35, comprising a further beam-forming network operable to receive signals from the antenna elements of said at least one group of antenna elements for use in an ESM analysis mode.

37. *(New)* An antenna system according to Claim 36, wherein the further beam-forming network comprises a local network and a remote network.

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Appl. No. (unassigned).

(National phase entry of PCT/GB03/02552)

December 16, 2004

38. (*New*) An antenna system according to Claim 23, further comprising ESM antenna elements for transmission of ESM signals.

39. (*New*) A platform comprising at least one antenna system according to Claim 23.

40. (*New*) A platform according to Claim 39, wherein the platform is an airborne vehicle, a ship or a boat.